DOCUMENT RESUME

ED 178 203 PS 010 989

AUTHOR Miller, Peggy
TITLE Direct Instruction in Language and Speaking: A Study of Mother-Child Discourse in a Working-Class Community.
SPONS AGENCY National Inst. of Mental Health (DHEW), Rockville, Md.; National Science Foundation, Washington, D.C.
PUB DATE Dec 78
NOTE 18p.; Due to small print size, Table 2 in appendix may be of marginal legibility; Paper presented at the New York Child Language Conference (New York, NY, December 1978)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Communication Skills; *Imitation; *Infants; *Language Development; Lower Class; *Mothers; Parent Child Relationship; *Teaching Styles; *Verbal Communication
IDENTIFIERS *Naturalistic Observation

ABSTRACT

A naturalistic-observational study of three inner-city, working-class mother-infant pairs was conducted to study early language development and maternal teaching styles. The subjects were three white 2-year-olds and their mothers. Observations were made under everyday conditions as the infants interacted with their mothers and other family members in their own homes. The observation sessions lasted one hour and were spaced at three-week intervals over a period of eight months. During these sessions the child's verbal and nonverbal behaviors were video recorded. Analysis was focused on direct instruction in language and speaking. All three children received direct instruction primarily in naming people and things. This instruction took one of three forms: adult requests name, child requests name, or child volunteers name. There was considerable variation across the children in the frequency of naming instruction and in the distribution of forms of naming instruction. Analysis of one of the mother-infant pairs indicated that the mother changed across time from attempts to elicit imitations to the use of what-that questions. Her infant continued to achieve a high rate of correct responding despite the mother's decrease in help. The results not only fail to support past claims of language deprivation in working-class families, but also indicate that the mothers in this study believed in the importance of teaching their children to talk and did, in fact, engage in direct instruction in language and speaking. (Author/SS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

SEP 2 5 1979

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED178203

Direct Instruction in Language and Speaking: A Study of Mother-Child Discourse in a Working-Class Community

Peggy Miller
Developmental Psychology
Teachers College
Columbia University

Paper prepared for the New York Child Language Conference, December 1978

PS 010989

One of the major assumptions of the language deprivation position is that the parents of poor children provide an inadequate environment for language learning. Hess & Shipman (1965), for example, studied maternal teaching styles in a laboratory setting and concluded that black mothers from the lower classes created a cognitive environment that lacked meaning, and that discouraged reflection and verbal mediation of behavior. The results of the present study of early language development in a white, working-class community not only fail to support past claims of language deprivation but indicate that the mothers in this study (1) believed in the importance of teaching their children to talk; and (2) did, in fact, engage in direct instruction in language and speaking. Moreover, an examination of one type of instructional sequence for one of the mother-child pairs revealed that direct instruction may be an effective way of transmitting certain kinds of linguistic and social knowledge.

The study was conducted in South Baltimore, an inner-city neighborhood of modest rowhouses whose residents raise families and work in nearby factories. The subjects were Amy, Wendy, and Beth--healthy, white, two year olds whose families lived within nine blocks of one another. At the beginning of the study they were starting to combine words and ranged in age from 18 to 25 months. All were first-born children. Amy's mother worked in a factory where she earned about $5000 per year.

Notes: I wish to thank The National Institute of Mental Health and The National Science Foundation for supporting this research. Thanks also to Peggy Crull, Lois Hood, and Mark Reutter for their helpful comments on earlier drafts of this paper.

The other mothers received much smaller incomes from Aid to Dependent Children. All of the mothers had lived in South Baltimore for at least five years and spoke the local dialect of nonstandard English. Two had dropped out of high school in the eighth grade; Wendy's mother was a high school graduate.

In contrast to previous research on poor children, the present study involved observations of children under everyday conditions--as they interacted with their mothers and other family members in their own homes. A preliminary get-acquainted period was followed by a succession of observation sessions, each lasting one hour, and spaced at 3-week intervals over a period of eight months. During these sessions the child's verbal and nonverbal behaviors were video recorded. The first eight video tapes for each child were transcribed. Each transcript consisted of four parts: (1) a record of child speech made in collaboration with the families; (2) a record of other people's speech; (3) a detailed description of the child's nonverbal behavior; and (4) other information about the accompanying context. Table 1 provides a general description of the first eight speech samples per child.

In addition to the video tapes, informal interviews with the mothers provided another source of data. In the final interview I asked each mother "How do you think children learn to talk?" Wendy's mother said, "by what they hear from other people. I think they pick things up from what other people say. And from me, you know, tryin to teach Wendy

different words to say." Amy's mother agreed that children learn by listening and emphasized the importance of talking early and often to children. She described how she taught Amy to improve her pronunciation. "So I would sit her down and I would, you know, make the sounds with her." Beth's mother related how she taught Beth the appropriate response to her grandfather's question. "When he says, 'Where's Lori at?' I told her to say, 'Well, she's home right now. She got off a school at 3:00.' So she did. She said it after I said it. That's how she learns too." To these mothers, then, language learning involved an interaction between the child and other people--who not only speak to the child but actively teach her.

The mothers' beliefs drew my attention to the issue of direct instruction in language and speaking. Did the families give direct instruction, and, if so, what kinds of information did they teach? To answer this question I first attempted to identify all interactions in which the mother or another speaker explicitly told the child what to say or how to say it, or quizzed her on these matters. I found that all three children received most direct instruction in the names of people and things. That is, in these interactions an adult or older child who knew the name of the referent in question attempted to elicit the name from the child, responded to the child's request for a name, or responded to a name that the child volunteered. Each sequence consisted of at least one naming

unit--a unit of discourse corresponding to each of the referents in question. In other words, each naming sequence consisted of one or more naming units, and each naming unit was one of three types: (1) adult requests name; (2) child requests name: or (3) child volunteers name. These possibilities are illustrated in the examples on the handout. In example one, the mother requests a name, "Say 'bee'" and Wendy responds "bee." This is one naming unit. Three other units follow, corresponding to the referents fox, possum, and mice, respectively. The second example is similar in that the mother also makes a request, "What is it? What's that?" Amy first responds incorrectly, her mother corrects her, Amy responds correctly, and, finally, her mother repeats Amy's response. This sequence consists of a single naming unit: the entire interaction revolves around a single referent. Example three is different from both previous examples, as here the child makes requests for names and her mother responds. And in example four the child first volunteers the names "duck" and "that a cat" and in each case her mother corrects her.

Table 2 gives the total number of naming units for each of the children, and the distribution of naming units by type. Here we can see that there is considerable variation across children in the overall frequency of naming units, with Amy having the highest frequency. There is also considerable variation across children in the distribution of naming units by type. Requests made by adults or older children to the child represented the majority of naming units for Amy and

Wendy but only 32% for Beth. Requests made by the child accounted for 2% of Wendy's naming units, 25% of Amy's, and 18% of Beth's. For Amy and Beth there was a striking developmental shift. During the first five samples the children made no requests for names. Each began to make requests in the sixth sample and by the final sample the children made all or virtually all of the requests for names made during that sample. In other words, the other speakers made almost no requests for names during the last sample. And, finally, names volunteered by the child varied from a low of 2% of all naming sequences for Amy to 22% for Wendy and 50% for Beth.

So far, then, we have seen that the issue of direct instruction is an ethnographically significant one for this group, that all three children received most direct instruction in the names of people and things and that naming sequences were composed of different types of naming units which were distributed differently by child. Now I would like to raise the question of what, if anything, the child was learning from these sequences.

To answer this question I examined the Amy data developmentally. I considered only those naming units which involved Amy's mother, as she, like the other mothers, was the primary teacher of names. As can be seen in Table 3, Amy's mother made a total of 80 requests for names. These took two major forms: she (1) attempted to elicit an imitation of a name (Say X); or (2) asked a what-that question. These forms could occur either singly or in combination. Overall, .83 of the

mother's requests included attempts to elicit imitations, whereas only .40 included what-that questions. There was, in general, a decline across the seven samples in the proportion of attempts to elicit imitations and a corresponding increase in the proportion of what-that questions.

How did Amy respond to her mother's requests? Table 4 presents the absolute and proportional frequencies of Amy's responses that fell into various categories. The most striking result is that not only did Amy respond at a very high rate (.94) but she achieved a high rate of correct responding across all samples: in five of the seven samples she responded correctly to at least .90 of her mother's requests. This does not imply that Amy necessarily arrived at the correct answer on the first try. Occasionally, she gave incorrect or other responses before giving the correct response.

How does Amy's high rate of correct responding relate to the changing form of her mother's requests? Recall that the majority (.83) of her mother's requests included attempts to elicit an imitation of a name (Say X). That is, Amy's mother, in effect, "gave" Amy the correct answer and Amy had only to repeat it in order to receive credit for a correct response. This would tend to insure a high rate of correct responding. In Figure 1 I have charted across the first six samples* (1) the proportion of the mother's requests that included attempts to elicit imitations of names; (2) the proportion of the mother's requests to which Amy responded correctly. This

*Sample VII is not represented on the figure because Amy's mother made only three requests for names.

figure shows that Amy continued to achieve a high rate of correct responding despite the fact that the form of her mother's requests changed so that she offered fewer and fewer names for Amy to imitate. In other words, Amy's ability to produce the correct answer without her mother's prompts improved across the six samples.

The sixth sample seems to be the pivotal one. Not only did Amy respond correctly with minimal help, but (as mentioned earlier) she also began to make requests for names. During samples six, seven, and eight, she requested 31 names from her mother, and her mother responded to all but one.

Now I would like to return to the question that I raised earlier: what might Amy be learning from these sequences? First, it seems likely that the naming sequences are helping Amy to learn the function of what-that questions. In the early samples Amy's mother relied mainly on the form Say X. But she also occasionally paired Say X with what-that questions. Gradually, she replaced Say X with what-that questions. That is, Amy's mother moved away from soliciting imitations to asking what-that questions, all within the context of frequently occurring, well-established routines. Meanwhile, Amy had not only achieved a high level of correct responding. She had also learned that the name of the referent was the appropriate response in these situations. When Marlene inserted the new form (what-that question) into an old frame, Amy knew that the name of the object was called for.

The picture that emerges here seems to be relevant to

issues raised by students of language input. In the book Talking to Children by Snow and Ferguson, both Snow and Cross conclude their papers by calling for studies of what children learn about language in specific interactions. Cross says that we should ask "how much of the input can be described in terms of language situations in which specific linguistic acquisitions may take place." (p. 182). What I am suggesting is that Amy was learning the function of what-that questions within the context of naming sequences in which the mother's input was well adapted to Amy's level of understanding about naming.

Moreover, the naming sequences occurred at a time when Amy had already given evidence that she could name spontaneously. In a previous analysis (Miller, 1978) I found that in the first sample Amy already was producing utterances which expressed the notions of existence or nomination. In other words, Amy seemd to move through a progression from spontaneous naming on her own, to responding to requests for names, and, finally, to making requests for names. This is analogous to the sequence which Hood (1977) reported for the expression of causality.

There are two other tentative answers to the question of what Amy is learning from the naming sequences. First, these provide opportunities for practicing vocabulary. And, second, it appears that Amy--like the Kaluli children of New Guinea who Schieffelin (in press) studied--was also acquiring social knowledge within the context of instructional sequences. Specifically, Amy was learning about the caregiver-child

relationship. She was learning that mother knows a great deal more than she knows, that mother is interested in sharing her knowledge with Amy, and that if Amy cooperates, she will learn. That is, Amy was learning that caring for children involves teaching them. My guess is that when Amy is a little older, she will do what her 5-year-old cousin occasionally did with her--teach a younger child the names of people and things.

Bibliography

Cross, T. G. Mothers' speech adjustments: thecontribution of selected child listener variables. In C. E. Snow and C. A. Ferguson (Eds.) Talking to children: language input and acquisition. Cambridge: Cambridge University Press, 1977.

Hess, R. G., & Shipman, V. C. Early experience and the socialization of cognitive modes in children. Child Development, 1965, 36, 869-886.

Hood, L. A longitudinal study of the development of the expression of causal relations in complex sentences. Unpublished Ph.D. dissertation, Columbia University, 1977.

Miller, P. Early language development of three children from a white, working-class community. Paper presented at Boston University Conference on Language Development, September, 1978.

Schieffelin, B. B. Getting it together: An ethnographic approach to the study of the development of communicative competence, In E. Ochs (Ed.) Developmental Pragmatics, New York: Academic Press, in press.

Snow, C. E. Mothers' speech research: from input to interaction. In C. E. Snow and C. A. Ferguson (Eds.) Talking to children: language input and acquisition. Cambridge: Cambridge University Press, 1977.

Table 1

General Description of Speech Samples

Child	Sample	Age (months, days)	Total Number of Utterances	Unintelligible Utterances (proportions)	MLU
Amy:					
	I	18,22	390	.07	1.5
	II	19,15	414	.06	1.5
	III	20,05	653	.08	1.6
	IV	20,26	525	.08	1.5
	V	21,16	515	.04	1.5
	VI	22,07	609	.07	2.2
	VII	23,02	605	.06	1.6
	VIII	23,18	679	.09	2.4
Wendy:					
	I	23,29	757	.11	1.6
	II	24,20	635	.15	1.6
	III	25,15	769	.11	1.6
	IV	26,02	625	.17	2.1
	V	26,22	580	.10	1.5
	VI	27,13	357	.14	2.0
	VII	28,04	375	.09	2.0
	VIII	28,24	635	.07	2.1
Beth:					
	I	25,09	625	.08	2.2
	II	25,23	584	.09	1.9
	III	26,04	387	.13	1.8
	IV	26,26	620	.09	2.2
	V	27,15	292	.11	2.0
	VI	28,07	544	.09	2.1
	VII	28,23	403	.12	2.4
	VIII	29,15	529	.09	2.5

(1) Mother requests names (4 naming units)

(Wendy and her mother are looking at a book.)

Mother: Say 'bee.' (M points to picture)

bee

Say 'fox.' (M points to another picture)

fox

Say 'possum.'

possum

(M turns page)

Mm. Say 'mice.'

mice

(Wendy III - excerpt from a longer sequence)

(2) Mother requests name (1 naming unit)

(Amy has been drinking soda from a cup.)

Mother: What is it?
What's that? (M points into Amy's cup)

beer

That's--. No, it ain't beer. Say 'soda.'

soda

Soda.

(Amy II - complete sequence)

(3) Child requests name (2 naming units)

(Amy has just finished "training" her "baby" to use the potty chair.)

what's that? (Amy points to picture on
what's that? back of potty chair)

Mother: Boy.

what's that? (Amy points to another picture)

Ball.

(Amy VIII - excerpt from a longer sequence)

(4) Child volunteers name (2 naming units)

(Beth and her mother are looking at a book.)

duck (Beth points to picture)

Mother: What is that?
That's a hen.

duck

Just call it a chicken. That's too hard for you.

chicken

Yeah.

that's cat (Beth points to another picture)

Oh, where?

cat there (Beth still pointing)

No, that's baby pig. There's the cat. (M points to picture of cat)

(Beth I - excerpt from a longer sequence)

Table 2

Frequency of Naming Units According to Roles of Speakers

	Amy										Wendy										Beth									
Category	I	II	III	IV	V	VI	VII	VIII	Total	prop	I	II	III	IV	V	VI	VII	VIII	Total	prop	I	II	III	IV	V	VI	VII	VIII	Total	prop
Other Speaker Requests Name	24	8	22	18	9	10	10	0	101	(.73)	3	14	48	16	3	1	0	8	93	(.76)	10	4	0	2	1	0	1	1	19	(.31)
Child Requests Name	0	0	1	0	0	11	4	19	35	(.25)	0	0	2	0	0	0	0	0	2	(.02)	0	0	0	1	0	1	3	7	12	(.20)
Child Volunteers Name	0	0	0	0	1	1	1	0	3	(.02)	3	3	11	2	1	1	2	4	27	(.22)	23	4	1	0	0	2	0	0	30	(.49)
Total	24	8	23	18	10	22	15	19	139	(1.00)	6	17	61	18	4	2	2	12	122	(1.00)	33	8	1	3	1	3	4	8	61	(1.00)

Table 3

Form of Amy's Mother's

Requests for Names

Sample	Requests for Names	Say X Only	What that-Q + Say X	What that-Q Only	Total Say X	Total What that-Q
I	23	17	5	1	22(.96)	6(.26)
II	8	7	1	0	8(1.0)	1(.13)
III	22	20	0	2	20(.91)	2(.09)
IV	6	2	3	1	5(.83)	4(.67)
V	10	2	5	3	7(.70)	8(.80)
VI	8	0	2	6	2(.25)	8(1.0)
VII	3	0	2	1	2(.67)	3(1.0)
	80	48	18	14	66(.83)	32(.40)

Table 4

Amy's Responses to Mother's

Requests for Names

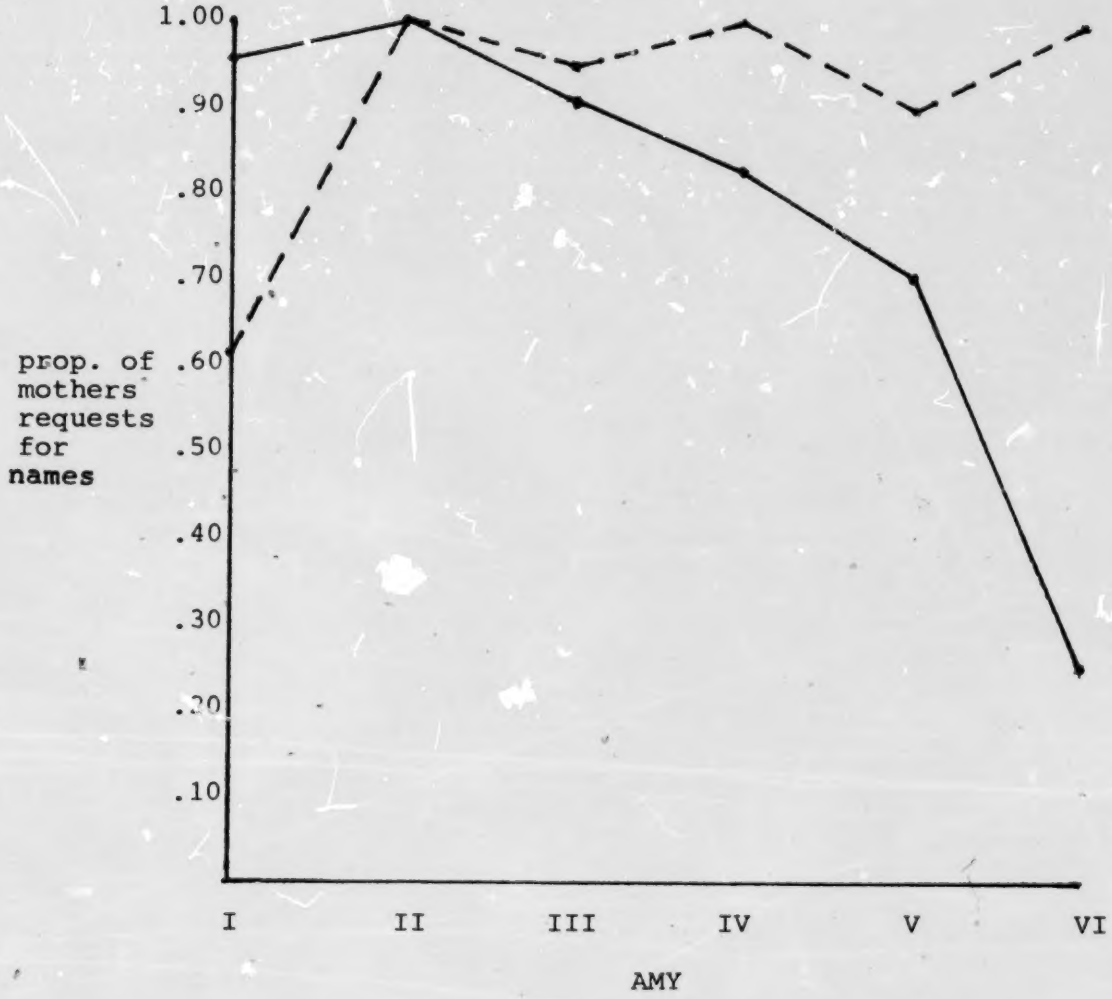
Sample	Requests for Names	No Response	Other Response	Incorrect Name	Correct Name
I	23	4	8	1	14(.61)
II	8	0	0	1	8(1.0)
III	22	1	2	0	21(.95)
IV	6	0	1	1	6(1.0)
V	10	0	4	2	9(.90)
VI	8	0	3	3	8(1.0)
VII	3	0	1	2	2(.67)
	80	5	19	10	68(.85)

Note: Amy's mother made no requests for names during sample VIII.

Figure 1

Amy's Rate of Correct Responding

in Relation to Form of Mother's Requests



_____ proportion of mother's requests for names which take the form, Say "X"

---------- proportion of mother's requests for names to which Amy gives correct response